

REMARKS

Claims 1-13 are all the claims pending in the Application. By this Amendment, Applicant amends claims 4, 6, and 8 to further clarify the invention. No new matter is being added. The amended claims 4, 6, and 8 are clearly supported throughout the specification, e.g., Figs. 3 and 4 and pages 8-11 of the specification.

Summary of the Office Action

The Examiner rejected claims 10-13 under 35 U.S.C. § 112, first paragraph, claims 4, 5, and 9 under 35 U.S.C. § 102(b), and claims 1-3, 6-8, and 10-13 under 35 U.S.C. § 103.

Rejections under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 10-13 under 35 U.S.C. § 112, first paragraph. Applicant respectfully traverses this rejection in view of the following comments.

First, with respect to claim 10, the Examiner alleges that the specification does not provide support for removing the pressing member independently of other elements (see page 2 of the Office Action). Applicant respectfully disagrees.

In one exemplary, non-limiting embodiment of the present invention, when the pressing member is to be cleaned or maintained, the pressing member is removed from the incubator by disengaging the engagement portion of the spring from the engagement groove of the pressing member (page 11, 1st full paragraph), where the free ends of the curved spring portions of the spring are in engagement with the lower surface of the guide member (paragraph beginning on page 9).

That is, in the above-noted non-limiting embodiment, the specification clearly indicates that the pressing member is removed by disengaging the engagement portion of the spring. To begin, the original specification does not describe removing the pressing member and the guide member, for example. Moreover, the free ends of the curved spring are engaged with a lower surface of the guide member and the engagement portion of the spring is attached to the pressing member. Clearly, then, if the pressing member is removed by disengaging the engagement portion of the spring, it is just the pressing member that is removed. If the pressing member was removed with the guide member, then it would not be removed by disengaging the spring. Indeed, the above-noted exemplary, non-limiting embodiment of the present invention described on pages 9 and 11 of the specification and depicted in Figs. 3 and 5, provides ample support for the feature of removing the pressing member independently of other elements as set forth in claim 10. Hence, it is appropriate and necessary for the Examiner to withdraw this rejection of claim 10.

Next, with respect to claims 11 and 13, the Examiner alleges that “the specification on page 8 states that the outer edge of the pressing member is tapered. This statement does not provide adequate support for the entire surface of the pressing member being chamfered” (see pages 2-3 of the Office Action). Applicant respectfully disagrees with the Examiner and provides the following comments in traversing this rejection.

Claims 11 and 13 recite: “wherein the pressing member has a chamfered surface disposed so as to abut the dry analysis element as the dry analysis element is inserted into the chemical analysis chamber.” Applicant respectfully points out that the Examiner is improperly

paraphrasing the language of the claims. That is, the claims recite “a chamfered surface” and not “entire surface of the pressing member is chamfered,” as alleged by the Examiner on pages 2-3 of the Office Action. “Chamfer” may be defined as “a groove” or “a bevel,” Merriam-Webster Online Dictionary.¹ A chamfered surface is simply a surface with a groove or a bevel. An exemplary chamfered surface is depicted in Fig. 3, as the surface abutting the dry analysis elements. In view of the above, it is appropriate and necessary for the Examiner to withdraw this rejection of claims 11 and 13.

Finally, with respect to claim 12, the Examiner alleges that the specification does not provide support for the pressing member having a planar surface sized to contact a substantial area of the dry analysis element (see page 3 of the Office Action). Applicant respectfully disagrees. The exemplary embodiment depicted in Fig. 3 shows the pressing member contacting most of the area of the dry analysis element. Moreover, the specification on page 8, first full paragraph, provides that the pressing member may be smaller than the dry analysis element 11 in plan so long as it can be brought into close contact with the portion of the mount around the spotting hole to tightly close the spotting hole. That is, the specification provides an alternative embodiment, where the pressing member is smaller. The original Fig. 3, however, clearly depicts the planar surface of the pressing member covering a substantial portion of the dry analysis element. Therefore, it is appropriate and necessary for the Examiner to withdraw this rejection of claim 12.

¹ <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=chamfered>

Prior Art Rejections

With regard to the prior art rejections, the Examiner rejected claims 4, 5, and 9 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,496,518 to Arai et al. (hereinafter “Arai”) and claims 1-3, 6-8, and 10-13 under 35 U.S.C. § 103 as being unpatentable over Arai in view of a newly found reference, U.S. Patent No. 4,814,279 to Sugaya (hereinafter “Sugaya”). Applicant respectfully traverses in view of the following remarks.

Turning to the cited references, Arai teaches an incubator for incubating the “dry-to-touch” chemical analysis film spotted with a sample liquid. The incubator has a base on which the frameless chemical analysis film is placed, an incubator cell member which is movable up and down between a lower position and an upper position and which presses a part of the upper surface of the frameless chemical analysis film against the incubator base while tightly enclosing a space around the frameless chemical analysis film in the lower position. In addition, the incubator has a first heater which heats the part of the incubator base with which the frameless chemical analysis film is brought into contact to a first predetermined temperature and holds the same at the first predetermined temperature, and a second heater which heats the incubator cell member to a second predetermined temperature higher than the first predetermined temperature.

Arai teaches an incubator 12 holding a number of cells 42 with a cover 46. Each cell 42 holds a chemical analysis film 1 (col. 6, lines 33 to 39). Arai further teaches having a film pressing member 61 which presses the film 1 at the corner portions thereof. The film pressing member 61 is moved upward and downward by use of a spring 62 (col. 7, lines 6 to 22). Moreover, Arai teaches that the film pressing member 61 is guided by a guide portion 64b (Figs. 5 and 6; col. 7, lines 28 to 49). In addition, Arai teaches two heating elements, a first heating

element 48 and a second heating element 57. The first heating element is disposed on the inner side of the upper surface of the incubator base 45 to heat the portion of the incubator base 45 which contacts the frameless chemical analysis films 1 (col. 7, lines 50 to 63). The second heating element 57 is provided on the outer peripheral surface of the cell cover 46 and heats cells 42. As a result of heating the cells 42, the temperature of the incubating cell member 64 and the film pressing member 61 cannot be lowered below the incubating temperature even if the environmental temperature lowers (Fig. 5; col. 7, line 64 to col. 8, line 8; col. 11, lines 30 to 46).

Sugaya, on the other hand, relates to an incubator for chemical-analytical slides which are utilized for quantitative analysis of various components in a body fluid such as blood and urine. The incubator has a cell into which a chemical-analytical slide is inserted and placed, a hole for photometry which is provided to a part of the slide placing-face of the above cell, a sealing member which is pushed to seal the opening for spotting of the slide, a pushing means which pushes the sealing member against the above hole for photometry, and a heating means which heats the slide. In Sugaya, the sealing member comprises a sealing part made of plastic which covers the opening for spotting and a pushing part being wear resistant which pushes the slide frame of slide. Thus, scratches and abrasion at the reverse face of the sealing member do not occur (*see* Abstract, col. 3, lines 3 to 21).

Specifically, Sugaya teaches that when a chemical-analytical slide is pushed by the lever 18 of the slide-pushing unit 8, the slide 1 moves forward. The slide 1 abuts against the taper face 19 of the sealing member 20, and pushes up the member 20. The slide 1 is further pushed into the cell 10, and stopped at a prescribed position. At that time, curling of the slide 1 is repaired

by the pushing of the pressure part 21, and the opening for spotting 3 is sealed by the sealing part 22. Then, incubation and photometric measurement are carried out, and the slide 1 is pushed out of the cell 10 by the lever 18 (Fig. 1; col. 4, lines 31 to 41).

102 Rejection

Turning to the rejections, the Examiner contends that Arai suggests each feature of independent claim 4 and its dependent claims 5 and 9.

With respect to claim 4, the Examiner alleges that Arai teaches indirect heating of the pressing member 61 and the guide portion 64b by the second heater 57 and that claim 4 does not require direct heating; therefore, Arai's heating is equivalent to the heating set forth in claim 4 (see page 6 of the Office Action). However, claim 4, as now amended, among a number of unique features, recites: "a heater heating the guide member by directing heat produced by the heater directly onto a surface of the guide member." Applicant respectfully submits that at least this unique feature is not taught or suggested by Arai.

In Arai, the second heating element is positioned on the outer surface of the cell cover 46 thereby heating the entire cell member 64 including the pressing member 61. That is, in Arai, the heat produced by the heater is directed towards the cover 66. In other words, in Arai, the heat from the heater is directed only onto the cover 66 so as to heat the entire cell member 64. Arai, however, fails to teach or suggest directly heating the guide member. That is, Arai fails to teach or suggest directing the heat from the heater directly onto the guide member.

In summary, the deficiencies of the Arai reference fall to the Examiner's burden to show inherent inclusion of the claim elements. Therefore, for all the above reasons, independent claim 4 is patentable. Claims 5 and 9 are patentable at least by virtue of their dependency on claim 4.

Claim Rejections under 35 U.S.C. § 103(a)

Next, the Examiner contends that claims 1-3, 6-8, and 10-13 are obvious over the combined teachings of Arai and Sugaya. Of these claims, only claim 1 is independent.

Independent claim 1, among a number of unique features, recites:

a guide member which supports the pressing member for up and down movement along a guide surface thereof; and
a heater which heats the guide member to a predetermined temperature...
wherein the pressing member comprises a planar surface sized to contact a substantial area of the dry analysis element...

The Examiner acknowledges that Arai fails to teach or suggest above recited features. The Examiner, however, alleges that Sugaya cures the deficient teachings of Arai and that one of ordinary skill in the art would have been motivated to combine the two references (see page 5 of the Office Action). This rejection is not supportable for at least the following reasons.

Even if Arai is combined with Sugaya, the combined teachings of the two references would not teach or suggest the unique combination of features as set forth in claim 1. For example, in Sugaya, the heater is provided in the upper part of the body 9 of the incubator, and accordingly, the press member is heated via coil spring 12 or via an air gap existing between the heater and sealing member 13. Sugaya, however, taken alone or in any conceivable combination

with Arai, fails to teach or suggest having the heater directly heat a guide member, which supports the pressing member for an up and down movement.

Moreover, the two references cannot be combined in the manner suggested by the Examiner. MPEP § 2143 recites that “if proposed modification would render the prior art invention being modified *unsatisfactory for its intended purpose*, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).” The Examiner alleges that one of ordinary skill in the art would have been motivated to replace Arai’s film pressing member with Sugaya’s film pressing member to prevent curling at the sides (see page 5 of the Office Action).

Arai, however, teaches that when a frameless chemical analysis film in a curled state is flattened by a flat pressing member, the lower side of the pressing member is brought into contact with the sample liquid on the film and the sample liquid adheres to the pressing member and can contaminate the sample liquid on the frameless chemical analysis film to be incubated next when the pressing member flattens the next film. Thus, in the case of the frameless chemical analysis film, it is preferred that the film be heated only by conduction of heat from the lower side thereof without contact heating of the upper side of the film. In this case, the frameless chemical analysis film can be held flat, for instance, by pressing down a part of the margin of the film which is free of the sample liquid (col. 3, lines 14 to 36).

Furthermore, Arai teaches that since the incubator cell member 64 and the film pressing member 61 are held at a temperature higher than the incubating temperature by the second heater 57, moisture condensation cannot occur on the inner surface of the incubator cell member 64 or

on the surface of the film pressing member 61. Moreover, even if the temperature of the film pressing member 61 is somewhat higher than the incubating temperature, the frameless chemical analysis film 1 cannot be heated higher than the incubating temperature by the heat of the film pressing member 61 since the film pressing member 61 is in contact with the frameless chemical analysis film 1 in a small area (col. 11, lines 30 to 46).

If one of ordinary skill in the art would replace the pressing member of Arai with the pressing member of Sugaya, this would render Arai device unsatisfactory for its intended purpose. That is, the purpose of Arai's teachings is to keep the pressing member at a higher temperature to prevent moisture condensation and at the same time not to have the pressing member's temperature influence the chemical analysis film 1. Consequently, Arai teaches that the chemical analysis film 1 is held only at its corners. If the Sugaya's pressing member was to be used, then Arai's sample liquid would adhere to the pressing member and contaminate the sample liquid on the frameless chemical analysis film and the chemical analysis film would be overheated.

In short, the two references cannot be combined in the manner suggested by the Examiner. Moreover, one of ordinary skill in the art would not have combined the two references as Arai deals with a frameless specimen and Sugaya discloses an incubator for a slide. Finally, even if somehow combined, the two references fail to teach or suggest the unique features of claim 1. For at least these exemplary reasons, claim 1 and its dependent claims 2, 3, and 13 are patentable over the combined teachings of Arai and Sugaya.

With respect to the rejected claims 6-8 and 10-12, they depend on claim 4. It was already demonstrated that Arai fails to teach or suggest all the unique features of claim 4. Sugaya fails to cure the deficient teachings of Arai. Sugaya only teaches that the slide is heated but fails to teach or suggest how the slide is heated. Moreover, one of ordinary skill in the art would not have been motivated to combine the references for the reasons explained above.

In addition, with respect to claim 6, the Examiner acknowledges that both, Arai and Sugaya fail to teach or suggest having the guide member being an inclined member. The Examiner, however, alleges that this feature is a matter of design choice (see page 5 of the Office Action). Applicant respectfully disagrees.

The Examiner has failed to support his assertion with factual evidence or a persuasive line of reasoning. The Examiner's characterization of the claimed limitation as "an obvious design choice" is merely an unsupported, generalized conclusion, and not a reason or showing, as required to support the rejection, and thus constitutes reversible error. *Ex parte Garrett*, 33 BNA's Patent, Trademark & Copyright J. 43 (1986) (reporting decision of Bd. Pat. App. & Inter. 9/30/86: Appeal No. 580-81). As such, the Examiner is requested to supply appropriate ***objective factual support*** or to withdraw the rejection.

The Examiner's attention is directed to MPEP § 2144.04 which suggests that when a shape has patentable significance and not a mere ornamental design, the shape should be considered in establishing obviousness, *e.g.*, In *Ex parte Hilton*, 148 USPQ 356 (Bd. App. 1965) (claims were directed to fried potato chips with a specified moisture and fat content, whereas the prior art was directed to french fries having a higher moisture content; while recognizing that in

some cases the particular shape of a product is of no patentable significance, the Board held in this case the shape (chips) is important because it results in a product which is distinct from the reference product (french fries)). In addition, *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) reversed the rejection “because the examiner has used the wrong standard of obviousness ” when asserting that the differences of the invention over the prior art were "well within the ordinary skill of the art”; *see also* MPEP § 2143.01 (“fact that the claimed invention is within the capabilities of one of ordinary skill in the art *is not sufficient by itself to establish prima facie obviousness.*”)

In the present case, the positioning of the guiding member is not a feature of ornamental design. For example, in an exemplary, non-limiting embodiment of the present invention, it is disclosed that the guide member extends obliquely upward from the inner edge of the opening so as to form a sliding channel for the pressure member. The pressure member is moved up and down along the inclined guide surface (pages 8-9 of the specification). In other words, in the above-noted exemplary embodiment, the guide member may be inclined to create a sliding channel for the pressure member. This exemplary, non-limiting embodiment of the present invention is provided by way of an explanatory example only and is not intended to limit the scope of the claims in any way. In short, the guide member having an inclined portion is not merely a matter of design choice. This exemplary feature has significant patentable weight. For at least this additional reason claim 6 is patentable over the combined teachings of Arai and Sugaya.

Amendment under 37 C.F.R. § 1.116
U.S. Appln. No. 10/042,320

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

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